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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,769	08/04/2003	Junichi Minamino	YAMAP0881US	6490
43076	7590	01/25/2007	EXAMINER	
MARK D. SARALINO (GENERAL) RENNER, OTTO, BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE, NINETEENTH FLOOR CLEVELAND, OH 44115-2191			PATEL, GAUTAM	
ART UNIT		PAPER NUMBER		
2627				
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS	01/25/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/633,769	MINAMINO ET AL.	
	Examiner	Art Unit	
	Gautam R. Patel	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12 December 2006.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 9-13 is/are allowed.
- 6) Claim(s) 1-8 and 14 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date. _____.	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

1. Claims 1-14 are pending for the examination.

RCE STATUS

2. The request filed on 12/12/06 for Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application is acceptable and a RCE has been established. An action on the RCE follows.

Claim Rejections - 35 U.S.C. § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the claimed invention is directed to non-statutory subject matter.

Claim 8 does not define what is being claimed but simply states what a recording medium has.

When nonfunctional descriptive material is recorded on some computer-readable medium, in computer or an electromagnetic carrier signal, it is **non statutory** since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e. abstract idea, stored in a computer-readable medium, in a computer or on an electromagnetic carrier signal does not make it statutory. See Diehr, 45 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in Benson were unpatentable as abstract idea because {[t]he sole particle application of the algorithm was in connection with programming of a general purpose computer.”}).

Also computer programs claimed as computer listings per, se, i.e., the description or expressions of the programs, are not “physical things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between computer program and other claimed elements of a computer which permit the computer the computer program’s functionality to be realized. See Lower, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim 14 has the same problem as above.

NOTE: In this case all we have a is recordable medium which has data arranged on it. All mediums have kind of data arranged on it, details of this arranged data does not make it patentable as such.

Language such as “computer readable recording medium having encoded thereon a computer program which causes the computer to perform the following steps:

- a.
- b.” etc. may be acceptable.

Claim Rejections - 35 U.S.C. § 112

4. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-7 are rejected under 35 U.S.C. 112 first paragraph, as containing subject matter which was not described in the specification in such way as to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Specification does not explain how modulation rule [which is state-type rule] is created or what is actually a state-type rule is.

Claim Rejections - 35 U.S.C. § 112

5. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 and 14 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2 and 3 are confusing now because it not clear at all how “state-type modulation rule” and “a digital sum value” are equivalent and one can be replaced with another. More importantly what is state-type modulation rule? Specification does not explain this so called state-type modulation rule at all.

Claim 3 has the similar problem.

Claim 8, lines 1-5 are confusing and unclear. It is not clear at all what is being claimed here. Claim is neither an apparatus nor a method, it simply states medium having some data on it. All mediums inherently has some data on it.

As to claim 14 it is not clear at all if it is an apparatus claim or a method claim. Claim does not clearly set forth the metes and bounds of the patent protection desired.

6. A search based on the best understanding of the claims has been made to find the most pertinent art, but no statement about invention will be appropriate at this time regarding the allowability of claims 1-8 and 14 and no art rejection will be made in this office action regarding the claims 1-8 and 14, due to the speculation required to interpret the claims because of their indefiniteness under 35 U.S.C. 112, 1st and 2nd paragraphs as noted above (see *In re Steele*, 134 USPQ 292).

7. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new grounds of rejection. As to arguments for the rest of the claims, please see explanation below.

8. Applicant's arguments filed on 7/21/06 have been fully considered but they are not deemed to be persuasive for the following reasons.

In the REMARKS, the Applicant argues as follows:

A) That: "MPEP § 2106.IV.B.1 explains that a computer-readable medium encoded with a data structure represents statutory subject matter provided the functional interrelationship between data structure and computer software and hardware components which permits ..." [page 6, paragraph 4; REMARKS].

FIRST: The Examiner agrees with the statement in MPEP. However the functionality is NOT realized and proper language is missing.

SECOND: See notes under 101 rejection.

B)That; “the Examiner may have misunderstood the language of claims1, 7 and 8 as previously amended

Where the prescribed modulation rule is state type modulation rule, the at least one parameter ... ” [page 7-8, paragraphs 4 to 2; REMARKS].

It seems the Applicants are merely repeating what is in only two places, in the specification, the statements regarding so called state-type modulation rule.

This does NOT explain what state-type modulation is or more importantly what state-type modulation rule is.

Allowable Subject Matter

9. Claims 9-13 are allowable over prior art of record.

NOTE: Claims 9-13 are allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose an apparatus which includes an offset amount changing section for changing “offset amount of a recording position of each data included in the series of recording data from a prescribed reference position until reference position reaches a target value”. It is noted that the closest prior art, Tanoue et al. (US 6,128,260) shows a similar apparatus which shows similar invention with different recording position for data so as to protect the disc from damage and Miyagawa et al. US 6,510,116 shows some concept of changing start edge position of the recording pulse. However both references fails to disclose a reaching f target value of an offset amount. Also Tanoue selects starting position based on random number as compared to applicant’s invention of precise linear fixed steps are taken to reach a target value.

Other prior art cited

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Miyagawa et al. (US. Patent 6510110).

Contact information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2600) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.



**GAUTAM R. PATEL
PRIMARY PATENT EXAMINER**

Gautam R. Patel
Primary Examiner
Group Art Unit 2627

January 22, 2007